

REFRACTIVE-DIFFRACTIVE SPECTROMETER

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ABSTRACT OF THE DISCLOSURE

[0051] A diffraction grating and a prism with the appropriate characteristics are employed to provide a combined dispersive characteristic that is substantially linear over the visible spectrum. Radiation from the grating and prism is collimated by a lens towards a detector array. The grating or a telecentric stop between the grating and prism is placed at a focal point of the lens in a telecentric arrangement so that equal magnification is achieved at the detector array. If the detector array is replaced by a plurality of optical channels, a multiplexer/demultiplexer is obtained.